

Montana and the Sky



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MONTANA AERONAUTICS DIVISION

June 1991

GOVERNOR SIGNS BILL CREATING DEPARTMENT OF TRANSPORTATION

As of July 1, 1991, the Montana Aeronautics Division will become part of the new Montana Department of Transportation gathering state government's transportation services under one roof following the signing of a bill authorizing the consolidation.

Governor Stan Stephens signed Senate Bill 164 on April 19, 1991, at ceremonies in Helena. The bill was a major piece of legislation in the administration's 1991 legislative agenda and received broad support in the Legislature.

Governor Stephens said this is a "real step forward for Montana in streamlining government services." The changes will not create more bureaucracy, but will allow for improved coordination of services and provide the public with "one-stop shopping" when dealing with such things as licenses, fees, and taxes, he said.

"In addition, the new agency will boost economic development by improving the way people and products are moved in, out of and around the state", Stephens added.



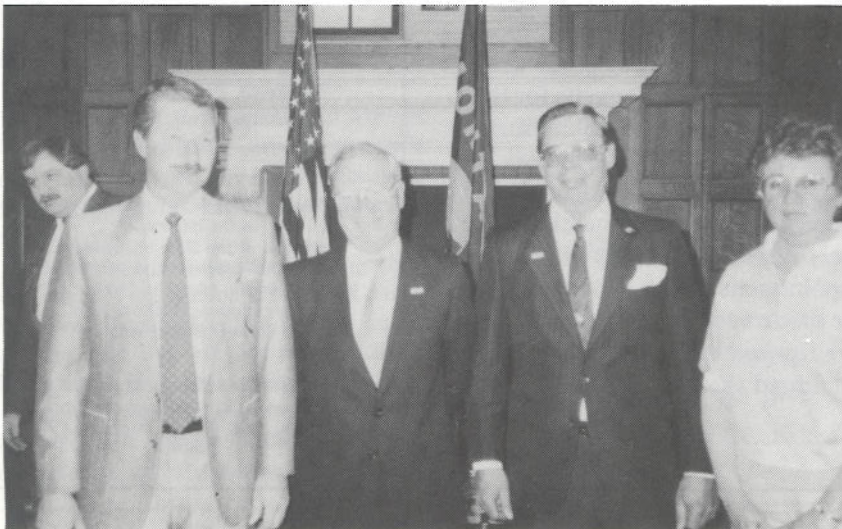
The department will combine state services dealing with air, ground and rail transportation that are currently spread among three agencies.

Offices added to the Highway Department to make up the new agency are the Aeronautics and Transportation Divisions of the Department of Commerce and the Fuel Tax Division of the Department of Revenue. About 45 employees will be involved in the moves.

The Department of Transportation will be divided into five major divisions: aeronautics, rail and transit, motor carrier transport (trucking), highways, and administration.

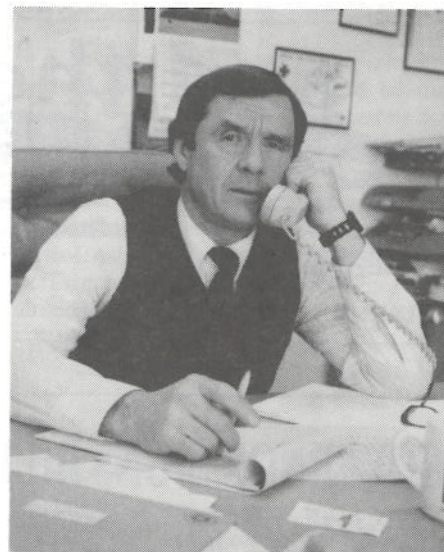
Pictured above, Governor Stan Stephens speaks during the ceremony and signing of Senate Bill 164. Pictured from left to right are John Rothwell, Director, Department of Highways, Chuck Brooke, Director, Department of Commerce, Senator John Harp, Kalispell, Representative Barry "Spook" Stang, St. Regis, and Dan Huestis, Great Falls, Chairman, Montana Highway Commission.

Montana Aeronautics Board members Joe Attwood, Great Falls, Chairman Joel Fenger, Chester and Sharel Stroh, Havre joined in the festivities witnessing the signing of the bill.



Administrator's Column

AOPA ESTABLISHES JOHN BAKER SCHOLARSHIP: The Aircraft Owners and Pilots Association (AOPA) has established a scholarship at Embry-Riddle Aeronautical University in the name of former AOPA President John Baker. Baker retired from AOPA the first of this year after serving 14 years as President. The 11 AOPA regional representatives donated \$1,000 to establish the scholarship and solicit additional contributions to keep the program alive. Embry-Riddle Aeronautical University is located in Daytona Beach, Florida and at Prescott, Arizona and has a total enrollment in excess of 13,000 students. Anyone wishing to contribute to the John Baker Scholarship may contact Tom Vogel, Director of Major Gifts, Embry-Riddle Aeronautical University, Daytona Beach, Florida 32114.



FAA EXTENDS DEADLINES FOR DESERT STORM VETERANS: Military personnel who served in Operation Desert Storm between August 2, 1990 and December 31, 1991 will be granted up to a six month extension for their currency deadlines.

NATA OUTRAGED OVER FAA RULING ON PFC's: The National Air Transportation Association expressed open dismay over FAA's final rule on Passenger Facility Charges (PFC) by airport operators. The PFC is better known by its previous name as a "HEAD TAX" which was determined to be unlawful until Congress made changes in the law early this year. The FAA's final rule will allow airports to implement the PFC's to on-demand air charter companies at airports where FBO total passenger enplanements are over 1% of the total enplanements for that airport. NATA President Larry Burian stated "IT'S OUTRAGEOUS!!" Burian said that the FAA has taken the wrong approach by imposing the head tax on Part 135 air charter passengers and that the difficulties associated with determining if a particular general aviation aircraft is commercial or non-commercial make it almost impossible for the PFC to be effectively imposed on small air charter operators. Burian went on to express his disappointment in the FAA's decision after early indications that they would exclude the on-demand air charter operators from collecting the head tax and that NATA was surprised and annoyed that these commitments were not honored. Burian further stated that "the FAA has done a lousy job in thinking this thing through."

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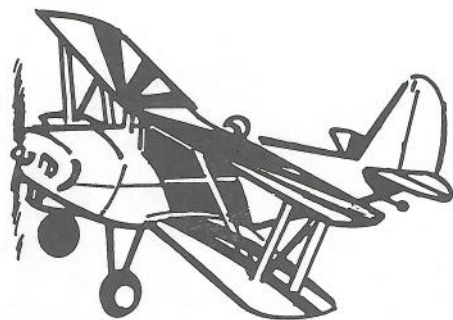
GA TASKFORCE PLANS THIRD ANNUAL LEARN-TO-FLY MONTH

General Aviation Taskforce officials said they will hold their third annual Learn-to-Fly promotion in June with the theme "Learn to Fly. It's the Lift You've Been Looking For." During the promotion, organizers will distribute a 30-minute "infomercial" - an information-based commercial - featuring athlete and pilot Bruce Jenner and John and Martha King of King Accelerated Ground Schools. Organizers also held a media roundtable dinner with editors from several general interest publications and plan to continue their promotions with the media.

Taskforce officials said the General Aviation Market Expansion Plan will provide materials for local flight school promotions throughout the month. "We will position the promotion as a local market effort with nearly 300 flight schools participating across the country, rather than a nationally administered event," said Tom Comeau, GAME Plan Chairman.

Task Force officials called the Learn-to-Fly Month promotion the most successful program in the GAME Plan. "During the past two years, our flight school has seen tremendous response as a direct result of the promotion," said Naomi Nierenberg of the Princeton Aero Corporation in Princeton, N.J.

NOTE: All photos and articles of interest are welcome and greatly appreciated. When providing photographs, please include the negatives if possible. This allows for better quality during reproduction. Thanks!



EAA FLY-IN AT LAUREL

Chapter 57 of the Experimental Aircraft Association will be holding their annual fly-in at the Laurel Airport, July 13, 1991. Breakfast and lunch will be offered along with a Fly-market.

Guests are encouraged to bring their aviation and non-aviation items to sell during this event. Vendor fees will depend on the amount sold but will not exceed \$20.00. Brunch will be \$3.00.

Profits from this event contribute to Chapter 57's hangar fund. For more information call Pat Kenney at 245-5246.

WHO ME?

The telephone rings,
You jump out of bed,
Grab the receiver,
While scratching your head.

Now who can this be,
He ought to be hung,
Still he must be my friend,
Cause my number he rung.

Hello, Who is it?
I was sleeping my friend,
The FAA's calling,
Quite a pickle you're in.

Remember last night,
About fifteen to seven,
When you filed a flight plan,
ETA at eleven?

Well, its now after three,
And no word we've received,
We've been searching for you,
But now we're relieved.

So, we've a favor to ask
(But he already knows it).
Next time you file one,
Please mister, "CLOSE IT"!!!

CALENDAR

June 17 - 28 - Aerospace Teacher Workshops.

June 22 - Rocky Mountain Air Show, Helena Regional Airport.

June 22 - Fly-in, Plains, combined with the Montana Antique Aircraft Association (MAAA).

June 22 - 23 - EAA Rocky Mountain Regional Fly-In, Greeley, Colorado.

June 29 - 30 - Car and Airplane Show/Swap Meet, Helena Regional Airport.

July 3 - 4 - Celebration 91, Bozeman Air Show and Fireworks Display, Bozeman.

July 5 - 7 - 5th Annual Family Fun Fly-in and Safety Expo, Kalispell City Airport.

July 10 - 14 - EAA Northwest Fly-in, Arlington, WA.

July 13 - EAA Chapter 57, 2nd Annual Fly-in, Laurel.

July 19 - 21 - Schafer Meadows Work Session.

July 20 - 21 - Lewis and Clark Air Festival, Lewiston, ID.

July 26 - Aug. 1 - 38th Annual Experimental Aircraft Association Convention and Fly-in, Oshkosh, WI.

August 2 - 4 - MAAA Fly-in, Three Forks.

August 7 - 11 - Airshow Canada, Abbotsford, BC.

August 10 - 11 - Fly Pocatello '91, Pocatello, ID.

August 10 - Cavanaugh Bay Campout, Idaho.

August 18 - Ennis Southwest Hangar, MPA, Fly-in.

August 22 - 25 - Ninety Nines 1991 Northwest Section Meeting, Holiday Inn, Bozeman.

August 31 - Sept. 2 - Fly-in, Yellowstone Airport, West Yellowstone.

Sept. 12 - 15 - Reno Air Races.

Sept. 22 - Felts Field Air Show, Spokane.

Sept. 20 - 22 - Mountain Search Pilot Clinic, Kalispell.

Oct. 4 - 6 - EAA 20th Annual Copperstate Fly-in, Lovefield, Prescott, AZ. For more information call 800-477-0046.

Dec. 7 - 50th Anniversary Confederate Air Force moves to Midland, Texas.

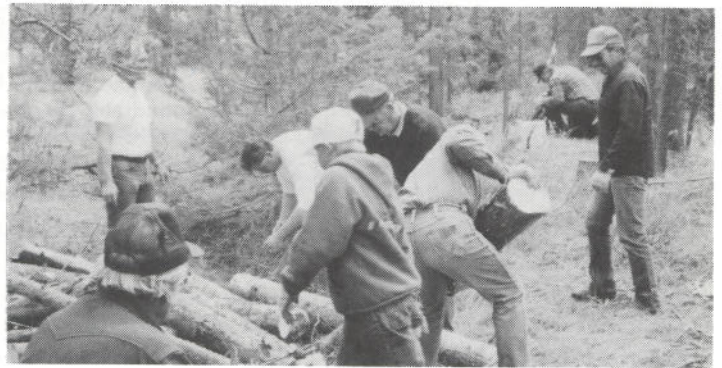
Feb. 7 - 9 - Flight Instructor Refresher Clinic (FIRC), Helena.

Feb. 26 - 29, 1992 - Montana Aviation Conference, Bozeman.

THIRD ANNUAL BENCHMARK WORK SESSION



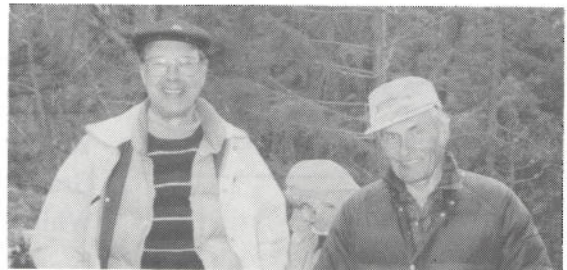
These laborers Mike Ferguson, Lowell Hanson and Mike Mulroney work hard loading trees they cut down.



A crew breaks out the chain saws to cut the trees into lengths before returning to Benchmark later in the summer to further cut and stack the logs for campfires.



In spite of the sometimes cool weather this group bundled up to share memories of the day.



These happy campers are Glenn Kenney and Will Mavis.



Before getting after it, these gentlemen discuss and contemplate "Day 2" of the mission.



Loren Smith, President, Great Falls Hangar, carves a baron of beef provided by this classy hangar. Note the flowers on the table. Did Loren forget the white linen tablecloth?



Finally....a little "R & R" after a long days work.



These folks gather around the campfire in hopes that the marshmallows were not left behind.

COLSTRIP RICKS FIELD DEDICATION



George Tillitt who soloed Bailey Egan many years ago presented him with his custom framed "shirt tail" in a special presentation.

Approximately 250 folks and 25 aircraft attended the dedication of the Colstrip Ricks Field despite the blustery, overcast weather. The field is named after the late John Ricks.

Morning pancakes and afternoon hotdogs were served by the Colstrip Hangar of the Montana Pilots Association. Other activities included balloon busting, flour bombing and many games for the children.

The project which began over eight years ago took the work, support and cooperation of many people. The ten percent county money required before obtaining the 90 percent matching federal dollars was donated by local power and coal companies, and other businesses.



These lovely ladies were certainly the "hostess' with the mostest" serving breakfast and lunch for those interested.



Those in attendance enjoyed the opportunity to visit with old acquaintances and make new friends during the ceremony.



Glyndon Scott,
Montana Wing
Commander, Civil Air
Patrol

John Williams,
Montana Power
Company



Ray Loveridge, Master
of Ceremonies



Mike Ferguson,
Montana Aeronautics
Division



BEWARE OF THUNDERSTORMS

By: Paul F. Eyssautier
National Weather Service, Great Falls

Montana presently is in the transitional weather months...when the cold winter mantle is shed for another year. During spring and early summer, daily weather for Montana, east and west of the Continental Divide, is characterized by warm, sunny days, and cool, nights. Afternoon and evening hours are punctuated by showers and thundershowers developing over the western mountains...which later roll across the plains. These storms can easily develop into severe thunderstorms...and possibly tornadoes...as they continue to roll across the eastern plains.

Flying during this time of year can be very tricky. A morning flight that commences with clear skies and light winds...can terminate with thundershowers obscuring mountains and hills, lightning, strong winds gusting from all directions, including the vertical, as well as severe icing and hail.

Let's take a close look at a typical Montana thunderstorm. As mentioned earlier, thunderstorms will generally develop over the western mountains, near the Continental Divide. As they develop and mature, updrafts initiated by surface heating will gather low level moisture into the cell of the thunderstorm. The increase in moisture and heating likewise increases the speed of the updraft. As the air moves up the core of the thunderstorm it cools and becomes saturated. In Montana, this saturation level, where clouds become visible, is relatively high compared to thunderstorms spawned in the midwest and southeast United States. Generally, bases of the clouds will be found between 8 and 10 thousand feet above sea level.

Several problems are encountered by pilots due to the high bases of these thunderstorms. The dry air below the bases of the storms quickly evaporates rainfall, generally before it reaches the ground. These trails of moisture, known as VIRGA, are visible emanating from the base of clouds. At times VIRGA is mistaken for a funnel cloud or tornado, due to its sometimes dark, ominous appearance when viewed from the distance.

Of concern for flyers, along with lightning, are the updrafts and down-drafts associated with thunderstorms. VIRGA is one indicator of the presence of strong down-drafts. Wind speeds associated with vertical up and down-drafts are frequently greater than 50 kts. Studies have also shown that horizontal wind speeds have exceeded 100 kts.

What this means for the pilot is that an aircraft can easily and quickly be moved up and down, as well as side to side without any warning. In mountainous terrain, as well as the plains and hills, this is a very dangerous situation. The best course of action of course, is to completely avoid thunderstorm, or shower activity at all costs.

GREAT FALLS AUTOMATED FSS

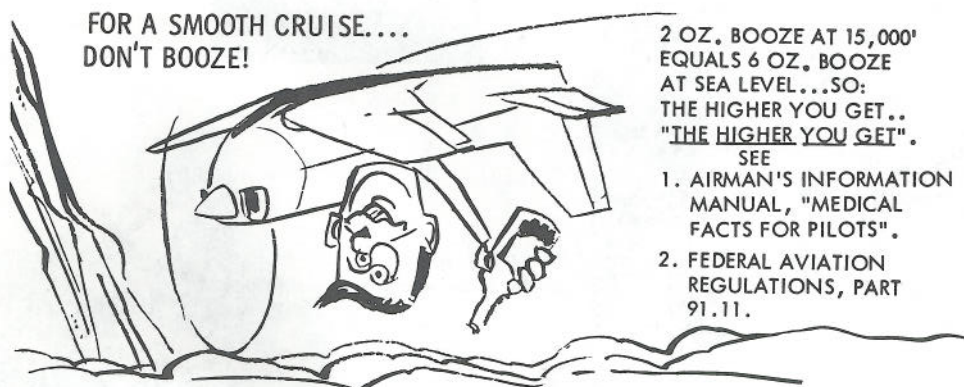
By: Gerald F. Dunn
Air Traffic Manager

Tuesday, June 4th, the Great Falls Automated Flight Service opened for business. The existing FSS in the old terminal building turned off the proverbial lights when the telephones were switched at 4:35 P.M.

Several years in the making, Great Falls joined 50 or so other AFSS's throughout the U.S. that utilize advanced technology and computer systems in providing services to pilots. Color graphics monitors replace the black and white facsimile charts that provide information on weather fronts and pressure systems, as well as satellite photos and radar data. An advanced communications system operates all incoming telephone calls and distributes them to either briefers or pre-recorded weather information. It also controls the air to ground radio frequencies that Great Falls monitors throughout the state. Model 1 is another feature that distinguishes an Automated FSS from other FSS's. This system provides complete weather route briefing information with just a few keyboard strokes and also handles all flight plan functions, keeping track of inbound, outbound, overdue aircraft, etc.

By and large, the new facility is operating very well. Each day, the specialists become more familiar and comfortable with the intricacies of the new equipment. Staffing is somewhat less than it should be due to the mandate that all of the other Montana FSS's remain open through at least October. Many of the personnel from the outlying facilities were due to be transferred to the AFSS this summer, alleviating staffing difficulties caused by vacation leave, etc. Reduced staffing at the AFSS may result in some services, such as the pre-recorded weather routes, being suspended for some periods.

The Great Falls AFSS is located at 3015 Airport Lane, across from the Montana Air National Guard complex. We welcome pilot visits and tours. For larger groups, please call 406-452-4892 in advance.



IMPORTANT ELT INFORMATION

- All ELT transmissions are reported to Search and Rescue by satellites.
- Ninety-seven percent of ELT reports are false alarms - over 600 per month.
- Searching for false alarms detracts from the search for a downed aircraft - that aircraft may be yours.
- Before start-up and after shut-down, tune your aircraft receiver to 121.5 - your ELT may be transmitting.
- If your ELT was on - call your FSS as soon as possible.
- Check your ELT batteries - dead batteries will send a distress signal to no one.
- An operable ELT may save your life.
- Disconnect the ELT battery whenever you remove an ELT from an aircraft.

KALISPELL YOUTH AWARDED SCHOLARSHIP



Lisa Zimmerman of Kalispell was the 1991 recipient of the Montana Aeronautics Division's \$250 Flight Scholarship. The scholarship awards \$250 of flight instruction at any Montana fixed base operator.

Lisa is a senior and the lead student in Jerome Hok's aviation science class scoring a 90 percent on the FAA pilot written examination.

Congratulations and Happy Flying Lisa!

AIRPORT TOURS

The Montana Aeronautics Division Career Awareness Tour Program involved over 400 young people this year from schools throughout western Montana, scout troops and various other groups of young people interested in aviation.

Tours begin with a briefing at Aeronautics which describes the functions performed by the Division while serving the aviation community and information about each business or governmental agency located on the airport with an emphasis on career opportunities. Also included is the safety of flight and the economic impact that aviation has on our State. Learning to fly is also discussed and questions are answered. We make every effort to make our young people (the aviators of tomorrow) feel welcome at the airport.

Tours are tailored to the interests of the group and the time available. Most tours this year included the Army Aviation Support Facility, Montana National Guard and the National Weather Service. Depending on the groups interests, the Helena Vocational Technical School Aviation Maintenance Department is toured. Due to Desert Storm increased security at the airport prevented groups from touring the FAA

Control Tower, however, that restriction was recently lifted.

The future of aviation is dependent on aviation education now!



Pictured are future aviators from Debbie Lee's preschool class at Helena.

DENSITY ALTITUDE

Make Density Altitude (D.A.) a "Check List Item" during the summer months. Performance data for aircraft is based on a "standard sea level day" which in reality seldom exists even at sea level not to mention here in the high country.

It is important for all pilots to be aware of the effects ALTITUDE (or elevation if on the ground), TEMPERATURE, and HUMIDITY have on aircraft and engine performance.

The performance of all aircraft is negatively affected by an increase in density altitude in the following ways:

1. increased takeoff distance;
2. reduced rate of climb;
3. increased true airspeed on approach and landing when using the same indicated

airspeed (IAS); and

4. increased landing roll distance.

Airports located at high elevations such as those in Montana together with high summer time temperatures can cause the density altitude to be so high that an aircraft cannot be operated safely. Other factors that have an effect on aircraft performance are weight, wind, turbulence, and pilot proficiency.

What can be done about adverse conditions to help maximize air craft performance? Fly during the early mornings before the temperatures rise, keep your aircraft as light as possible, lean engine prior to takeoff for maximum power, avoid turbulent air, especially on takeoffs and landings.

A pilots first reference for aircraft performance information should be the aircraft owner's handbook developed by the manufacturer. When manufacturer supplied references are unavailable, the Koch Chart may be used to figure approximate temperature and altitude adjustments for aircraft takeoff distance and rate of climb performance. When temperatures and altitude are high...think D.A....IF IN DOUBT - WAIT IT OUT!

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MEMBER

NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS

PURPOSE—"To foster aviation, as an industry, as a mode of transportation for persons and property and as an arm of the national defense; to join with the Federal Government and other groups in research, development, and advancement of aviation; to develop uniform laws and regulations; and to otherwise encourage cooperation and mutual aid among the several states"



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